

REMARKS

Initially, Applicants would like to express appreciation to the Examiner for taking the time to discuss this case with Applicants' attorney on August 24th, 2006. The amendments made by this paper are consistent with the proposals discussed during the interview.¹

In the last Office Action, mailed July 5, 2006, claims 1-44 were considered and rejected under 35 U.S.C. 102(e) as being anticipated by newly cited Connelly et al (US 7,020,893 B2) hereinafter Connelly.² As discussed during the interview, however, it is clear that Connelly fails to anticipate or even make obvious the claimed invention. In fact, as pointed out during the interview, the previous rejection failed to establish a prima facie case of anticipation or obviousness inasmuch as Connelly fails to teach or suggest several of the claim elements recited in the claims.

By this paper, claims 1, 5, 13, 16, 20, 24, 31 and 34 have been amended, such that claims 1-44 remain pending for reconsideration. Claims 1, 13, 20 and 31 are the only independent claims at issue, with claim 1 being directed to a non-functional method, claim 13 being directed to a similar method, and claims 20 and 31 being directed to corresponding computer program products, respectively.

As discussed during the interview, and previously, the present invention is generally directed towards embodiments for generating data streams of a specified bandwidth with the use of scheduling information.

The claimed embodiment recited in claim 1, for example, includes generating a data stream of a specified bandwidth for broadcast to one or more client systems, wherein at least one identifier is stored for at least one data source and that indicates where data to be included within the data stream may be obtained and a bandwidth allocation associated with requirements for broadcasting the data. Scheduling information is also stored for the identifiers that comprise a time when the data from the at least one data source should be added to the data stream for broadcast to the one or more client systems. As newly recited, the scheduling information also includes at least one of a retransmission frequency when said data includes static data or a refresh frequency when said data includes dynamic data. Previously recited elements regarding the timing for storing the scheduling information (e.g., only after verifying there is adequate bandwidth) still remains in claim 7.

¹ Some additional amendments have been made by this paper in addition to the amendments discussed during the interview to further promote consistency and clarity of the claim language. The claim amendments are generally supported by the disclosure found throughout the specification, and as recited in claim 5 for example. It will be noted that the claim amendments made by this paper were clearly not necessary to distinguish over Connelly, inasmuch as Connelly clearly fails to teach or suggest the previously claimed embodiments. The amendments have been made to the claims, nonetheless, to present currently preferred embodiments that are in many regards broader than those previously presented.

² Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

As further recited, data is requested and received from at least one corresponding data source and, at the time specified in the scheduling information, the data is added to the data stream and broadcast to the one or more client systems.

Connelly, on the other hand, generally deals with creating a queue for broadcasting data through the generation of a broadcast queue that is created and ordered according to client demand. While Connelly does indicate that the ordered list can be altered, after it is created, to accommodate contractual requirements and bandwidth constraints, Connelly clearly fails to disclose or suggest that the identifiers and corresponding scheduling information is only stored after considering whether there is adequate bandwidth (as previously recited in the independent claims and as now recited in claim 7). Connelly also clearly fails to teach or suggest that scheduling information stored with the identifiers includes a retransmission frequency when the broadcast data includes static data or a refresh frequency when the broadcast data includes dynamic data, as recited in the claims in combination with the other recited claim elements.

Connelly is also clearly deficient in many other regards, as specifically pointed out during the interview. For example, Connelly clearly fails to teach or suggest at least the following claim limitations:

for each identifier, storing scheduling information that comprises a time when the data from the at least one data source should be added to the data stream (as recited in the independent claims)

adding the data obtained from the at least two data sources to distinct sub-streams within the data stream, whereby the data from the at least two data sources arrives at the one or more client systems simultaneously (as recited in claim 2 and other similar claims).

wherein **at least one of the plurality of sub-streams is dedicated to broadcasting data in real time** (as recited in claim 3 and other similar claims).

wherein the scheduling information further comprises (i) a time to begin broadcast of the data, (ii) a retransmission frequency to increase the probability that static data is received by the one or more client systems, (iii) a refresh frequency to assure that dynamic data is updated at the one or more client systems, (iv) a time when a final broadcast of the data should end, (v) meta-data associated with the data, (vi) a bandwidth allocation for the data, and (vii) data size information for static data (as recited in claim 5 and other similar claims).

an act of checking any previously existing scheduling information to verify that bandwidth is available in the data stream prior to storing the scheduling information(as recited in claim 7 and other similar claims).

an act of calculating at least one of (i) a recommended bandwidth for a specified refresh or retransmission frequency, or (ii) a recommended refresh or retransmission frequency for a specified bandwidth (as recited in claim 8 and other similar claims).

wherein the scheduling information further comprises meta-data associated with each of the one or more files, the meta-data comprising at least one of (i) an expiration time after which the one or more clients may delete a file, (ii) an extension time for extending the expiration time of a file that already exists, (iii) one or more allowed update flags if a file represents a directory, (iv) a trigger for causing some action to be performed at a client system, (v) one or more expressions for specifying one or more conditions that are associated with a file (as recited in claim 10 and other similar claims).

an act of delivering the data stream to a broadcaster for broadcast to the one or more client systems (as recited in claim 12 and other similar claims).

wherein the data stream is broadcast to a plurality of clients even though it is only intended to be consumed by one of the clients and accordingly consumed by only the one of the clients (as recited in claim 12 and other similar claims).

Connelly and the previous Office Action are also deficient in many other respects and with regard to many of the other independent and dependent claims (including claims 40-44). In fact, the disclosure cited by the Examiner as purportedly teaching the claimed invention primarily consists of three redundant claim recitations in Connelly that address the creation of the broadcast queue according to client demand/rankings.³ This disclosure clearly fails to teach or suggest the claimed embodiments, for at least the reasons provided above and as discussed during the interview.

The previous rejections made in the last Office Action, including the rejections of claims 9 and 11 were also deficient in many other regards, inasmuch as they clearly failed to provide support or rationale for the rejections. In fact, with specific regard to claim 11, no disclosure or citation was even provided.

³ Col. 8, ll. 34-65; Col. 9, ll. 15-50; Col. 25; Col. 30, ll. 34-65, Col. 33, ll. 1-37 and Col. 34, ll. 29-62).

Instead, it was merely asserted that the art taught the recited claim. This assertion, however, is simply not true, as discussed during the interview. The Examiner also acknowledged that previous rejection was deficient in at least this regard.

Each of these foregoing issues, which were presented during the interview, have been reiterated within this amendment at the specific request of the Examiner.

In view of the foregoing and for at least the reasons addressed during the interview, Applicants respectfully submit that the pending claims are now in condition for immediate allowance.

Although only some of the rejections have been specifically addressed, Applicants respectfully submit that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicants acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicants reserve the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicants specifically request that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 5th day of October, 2006.

Respectfully submitted,



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